WHAT IS CLAIMED IS:

1. A method of preventing or treating obesity and obesity-related complications in a subject comprising administering to the subject a Cox-2 inhibitor.

2. The method according to claim 1, wherein the Cox-2 inhibitor is administered to the subject in combination with one or more weight-loss agents.

3. The method according to claim 1, wherein the Cox-2 inhibitor comprises a Cox-2 selective inhibitor.

4. The method according to claim 3, wherein the Cox-2 selective inhibitor comprises at least one compound that is selected from the group consisting of celecoxib, parecoxib, deracoxib, valdecoxib, etoricoxib, meloxicam, rofecoxib, lumiracoxib, prodrugs of any of them, and mixtures thereof.

5. The method according to claim 3, wherein the Cox-2 selective inhibitor comprises celecoxib.

6. The method according to claim 3, wherein the Cox-2 selective inhibitor comprises a chromene Cox-2 selective inhibitor.

7. The method according to claim 6, wherein the chromene Cox-2 selective inhibitor comprises at least one compound selected from the group consisting of
(S)-6-chloro-7-(1,1-dimethylethyl)-2-(trifluoromethyl)-2H-1-benzopyran-3-carboxylic acid,
(2S)-6,8-dimethyl-2-(trifluoromethyl)-2H-chromene-3-carboxylic acid,
(2S)-6-chloro-8-methyl-2-(trifluoromethyl)-2H-chromene-3-carboxylic acid,
(2S)-8-ethyl-6-(trifluoromethoxy)-2-(trifluoromethyl)-2H-chromene-3-carboxylic acid,
(S)-6,8-dichloro-2-(trifluoromethyl)-2H-1-benzopyran-3-carboxylic acid,
(2S)-6-chloro-5,7-dimethyl-2-(trifluoromethyl)-2H-chromene-3-carboxylic acid, and mixtures thereof.

8. The method according to claim 2, wherein the weight-loss agent comprises at least one compound selected from the group

consisting of anorectics, serotonin reuptake inhibitors, serotonin releasing agents, activators of ATP-dependent K^+ channels, anti-hyperglycemics, amphetamines and amphetamine derivatives, melanocortin-4 receptor agonists, neuropeptide Y antagonists, lipase inhibitors, beta(3)-adrenergic agonists, glucagon-like peptide-1 agonists, PPAR-gamma antagonists, orexins, enterostatin agonists, galanin antagonists, urocortin agonists, CCK agonists, UCP activating agents, prolactin modulators, growth-hormone secretagogues, benzoazine derivatives, ciliary neurotropic factor, selective CRF agonists, a1-adrenergic receptor agonists, antihistamines, 5-HT_{2C} agonists, 5-HT_{2A} agonists, catecholamine modulators, chromium formulations and derivatives, dopamine antagonists, adipocyte complement-related protein (Acrp30), adipocyte complement-related protein (Acrp30) modulators, adipsin modulators, cannabinoid antagonists, tyrosine phosphatase modulators, 11beta hydroxysteroid dehydrogenase type 1 modulators, cyclic AMP response element-binding protein modulators, diacylglycerol o-acyltransferase modulators, dehydroepiandrosterone derivatives, fatty acid transport protein 4 modulators, G protein beta-3 subunit 825T modulator, high mobility group 1C modulators, kallikrein modulators, melanin-concentrating hormone receptor modulators, perilipin modulators, *tub* gene modulators, alpha-adrenergic agonists, beta-adrenergic agonists, anticonvulsants, leptin receptor modulators, metabolic accelerators, adipogenesis modulating agents, pyrroloquinolines, NK-1 receptor antagonists, PPAR-alpha agonists, ghrelin receptor antagonists, leptin agonists, histamine-3 antagonists, and mixtures thereof.

9. The method according to claim 2, wherein the weight-loss agent comprises at least one compound selected from the group consisting of phentermine, diethylpropion, mazindol, phendimetrazine, benzphetamine, sibutramine, orlistat, fenfluramine, dexfenfluramine, bupropion, diazoxide, diethylpropion, metformin, sertraline, topiramate, (+)norfenfluramine, leptin derivatives and formulations, rimonabant, aminorex, adiponectin, phenylpropanolamine, amantadine, nizatidine,

cimetidine, amphetamine, dinitrophenol, dehydroepiandrosterone, mazindol benzphetamine, phendimetrazine, phentermine, dexfenfluramine, amylin, mazindol, ephedrine, fenfluramine, ergoset, fluoxetine hydrochloride, fluvoxamine maleate, trazodone hydrochloride, dehydroepiandrosterone, glucocorticosteroid, citalopram, chromium picolinate, L-glutamine, caffeine, methamphetamine hydrochloride, benzphetamine hydrochloride, sumatriptan succinate, human steroidal hormone (RF1051), cholecystokinin, bombesin, glucagon, insulin, cyclohistidyl-proline, somatomedin, apoprotein IV, digitalis, thyroid hormone, diazoxide, naltrexone, 5-hydroxy tryptophan, hypericum, botanical P57, phytostanol, aminosterol, beacon, calpain 10, corticotropin releasing hormone, follistatin, GATA, oleylethanolamide, agouti protein, eltroxin, levothroid, tertroxin, synthroid, lonamin, phen-fen, eltroxin, cyronine, asenlix, bisphenol A diglycidyl ether, desmethylsibutramine, prodrugs of any of them, and mixtures thereof.

10. The method according to claim 1, wherein the subject suffers from or is predisposed to obesity.

11. The method according to claim 1, wherein the subject is obese and suffers from or is predisposed to one or more obesity-related complications selected from the group consisting of high blood pressure, hypertension, high blood cholesterol, dyslipidemia, type 2 diabetes, insulin resistance, glucose intolerance, hyperinsulinemia, coronary heart disease, cardiovascular disease, hypercholesterolemia, hypertension, angina pectoris, congestive heart failure, stroke, gallbladder disease, gallstones, cholescystitis, cholelithiasis, gout, osteoarthritis, rheumatoid arthritis, obstructive sleep apnea, respiratory problems, cancer (such as endometrial, breast, prostate and colon cancers), complications of pregnancy, poor female reproductive health irregularities (such as menstrual irregularities, infertility and irregular ovulation), bladder control problems (such as stress incontinence), uric acid nephrolithiasis, psychological disorders (such as depression, eating disorders, distorted body image and low self esteem), coronary heart disease, atherosclerotic

diseases, atherosclerosis, stable angina, unstable angina, type II diabetes, high LDL cholesterol, low HDL cholesterol, high triglycerides, and high blood glucose.

12. A method of modulating adipogenesis in a subject comprising administering to the subject a Cox-2 inhibitor alone or in combination with one or more weight-loss agents.

13. A therapeutic composition comprising a Cox-2 inhibitor and a weight-loss agent.

14. A pharmaceutical composition comprising a Cox-2 inhibitor, a weight-loss agent, and a pharmaceutically acceptable carrier.

15. A kit comprising one dosage form comprising a Cox-2 inhibitor and a second dosage form comprising a weight-loss agent.